

Claims

1. An electromagnetic wave shielding material which comprises a transparent substrate and a fine line pattern
5 formed thereon,
 wherein the fine line pattern comprises a metal plating film using a physically developed metal silver as a catalytic nucleus.
2. The electromagnetic wave shielding material according
10 to Claim 1, wherein the fine line pattern has a thickness of 15 μm or less and a line width of 40 μm or less, a total luminous transmittance of 50% or higher, and a surface resistance of 10 ohm/ \square or less.
3. The electromagnetic wave shielding material according
15 to Claim 1 or 2, wherein the total luminous transmittance is 60% or higher.
4. The electromagnetic wave shielding material according to any one of Claims 1 to 3, wherein the surface resistance is 7 ohm/ \square or less.
- 20 5. The electromagnetic wave shielding material according to any one of Claims 1 to 4, wherein the thickness of the fine line pattern is 0.5 to 15 μm .
6. The electromagnetic wave shielding material according to any one of Claims 1 to 5, wherein the thickness of the
25 fine line pattern is 2 to 12 μm .
7. The electromagnetic wave shielding material according to any one of Claims 1 to 6, wherein the line width of the fine line pattern is 1 to 40 μm .
8. The electromagnetic wave shielding material according
30 to any one of Claims 1 to 7, wherein the plating is an electrolytic plating.
9. The electromagnetic wave shielding material according to Claim 8, wherein the plating is at least one kind of plating selected from copper and nickel.
- 35 10. A process for preparing an electromagnetic wave shielding material which comprises exposing a light-

- sensitive material having a physical development nuclei layer and a silver halide emulsion layer on a transparent substrate in this order, precipitating metal silver with an optional fine line pattern onto the physical development
- 5 nuclei layer by physical development, then, removing a layer provided on the physical development nuclei layer, and subjecting to plating a metal with the use of the physically developed metal silver as a catalytic nucleus.
- 10 11. The process for preparing an electromagnetic wave shielding material according to Claim 10, wherein the fine line pattern has a thickness of 15 μm or less and a line width of 40 μm or less, a total luminous transmittance of 50% or higher, and a surface resistance of 10 ohm/ \square or less.
- 15 12. The process for preparing an electromagnetic wave shielding material according to Claim 10 or 11, wherein the total luminous transmittance is 60% or higher.
13. The process for preparing an electromagnetic wave shielding material according to any one of Claims 10 to 12,
- 20 wherein the surface resistance is 7 ohm/ \square or less.
14. The process for preparing an electromagnetic wave shielding material according to any one of Claims 10 to 13, wherein the thickness of the fine line pattern is 0.5 to 15 μm .
- 25 15. The process for preparing an electromagnetic wave shielding material according to any one of Claims 10 to 14, wherein the thickness of the fine line pattern is 2 to 12 μm .
16. The process for preparing an electromagnetic wave
- 30 shielding material according to any one of Claims 10 to 15, wherein the line width of the fine line pattern is 1 to 40 μm .
17. The process for preparing an electromagnetic wave shielding material according to any one of Claims 10 to 16,
- 35 wherein the plating is an electrolytic plating.
18. The process for preparing an electromagnetic wave

shielding material according to Claim 17, wherein the plating is at least one kind of plating selected from copper and nickel.

19. The process for preparing an electromagnetic wave
5 shielding material according to any one of Claims 10 to 16,
wherein an electrolytic plating is carried out by dipping a
transparent substrate on which a physically developed
silver has been formed in a bath containing copper sulfate
and sulfuric acid as main components with a current density
10 of 1 to 20 ampere/dm² at 10 to 40°C.